

London Stock Exchange Derivatives Market

LSEDM701 - BCS User Manual

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Contents

5.6 Transferred Positions5.7 SubAccount Changes

1.0	Introduction	4	6.0	Trades	30
	1.1 About BCS	4		6.1 Trades	30
	1.2 Work Environment	4		6.2 Trade Transfer	31
	1.3 Getting Started	4		6.3 International Give up	34
	1.4 Clearing Calendar	5		6.4 Trade Separation	35
				6.5 Open Close Change	36
				6.6 Client Code Change	37
				6.7 Trade History	38
2.0	Application Layout	5		6.8 Transferred Trades	39
2.0	Application Layout	3		6.9 Separated Trades	41
		_		6.10 Open Close Changes	42
	2.1 Application Start	5		6.11 Client Code Changes	43
	2.2 Main Window	6			
	2.3 Tool Bar	8			
	2.4 Command Selection	8			
	2.5 Change Password	8	7.0	Operations To Be Confirmed	45
				7.1 Confirming Received Trades	45
3.0	Common Functions	9			
	3.1 Window Features Configuration	9			
	3.2 Quick Filters	10	8.0	Exercise and Assignments	48
	3.3 Saving and Closing Windows	11			
	3.4 Data Print	11		8.1 Exercise Requests	48
	3.5 Data Export to Excel or ASCII	11		8.2 Exercise Request History	50
				8.3 Cancel Sent Early Exercise Request	ts 53
				8.4 Expiry Exercises Requests	53
				8.5 Ex by Ex Exercise Request	55
4.0	Archives	11		8.6 Assignments	56
	4.1 Markets	12			
	4.2 Classes	12			,
	4.3 Tradable Series	13	9.0	Report	57
	4.4 Participants	15			
	4.5 Non-clearing Members	16		9.1 Report	57
	4.6 SubAccounts	17			
			A	andia A. Banadan Farancaiana	
5.0	Positions	21	Appe	ndix A – Regular Expressions	59
	5.1 Positions	21			
	5.2 Position Rectification Request	21			
	5.3 SubAccount Changes	24			
	5.4 Exercise Request	24			
	5.5 Rectified Positions	25			

1.0 Introduction

This chapter describes the application and work environment main features. It provide the user with the needed information aimed at its correct use.

1.1 About BCS

The BltS Clearing Station (BCS) for London Stock Exchange Derivatives Market is a GUI application allowing an authorized user, namely a Clearing House member, to execute clearing operations on London Stock Exchange Derivatives Market markets traded financial products.

The application allows to:

- Receive trades executed by members in real time and their own non-clearing members in the current trade date and perform transfer, split, open/close and client code change operations
- View the history of a specified trade
- Receive positions in real time and perform rectify, subaccount change and exercise operations
- Manage exercise and assignments operations
- Manage subaccounts
- Dow nload clearing reference data
- Receive and save settlement reports provided by the clearing house

1.2 Work Environment

The BitS Clearing Station is based on a client-server architecture: the server layer is located at one of the London Stock Exchange Derivatives Market server farms and connected to the Clearing House and markets through their network access points. On the other hand, the client layer is installed on Clearing House members' PCs.

BCS client is the sole comprehensive solution for all London Stock Exchange Derivatives Market clearing functionalities.

The electronic platform supporting the client application is structured to make its access independent from the technical frame features of central systems.

1.3 Getting Started

In order to access to the clearing services through BCS, the user needs a login name, a passw ord and a Member Code. This is requested from Turquoise.

BCS client can be downloaded from the Internet and installed on one or more members' PCs. The BCS workstation needs Java Virtual Machine V.1.5 or higher. A compatible version of the JVM will be installed during the setup process of the BCS Client.

The client can be used to reach production or test environment. By default the Client will point to the production environment. The user can select the desired environment at the startup in the login window.

In case of NAT address the user has to do the following:

Close the BCS Client if running

- Go into the BCS Client installation directory (usually C:\Program Files\BltSystems\BCS Client XXX\);
- Look for the "etc" directory;
- Change the file "GKApi_J_Version.cfg" in the "etc\Server" directory, specifying the correspondent IP Address.

The BCS Client can be launched also using a web browser as a Java applet application. Two websites are available for this purpose, one for the production and one for the test environment.

Please notice: the user is not allow ed to put chars ';' and '=' in free fields; otherwise an error message will be shown on the GUI.

1.4 Clearing Calendar

A configuration file, namely:

<installation directory>\Clearing Client\etc\client\Common.config (the default <installation directory> is C:\Program\BitSystems)

allows the user to define the current year calendar with holidays.

An example of the holiday configuration file is shown hereafter:

HOLIDAYS=*SUNDAY;*SATURDAY;01/01;\$EASTER;\$EASTER+1;\$EASTER-1;\$EASTER-2:01/05:15/08;\$CHRISTMAS;\$CHRISTMAS+1:\$CHRISTMAS-1:31/12

Where:

- "; " = Field separator character
- *SUNDAY = every Sunday of the year
- *SATURDAY = every Saturday of the year
- \$EASTER = Easter date
- \$CHRISTMAS = Christmas date
- \$EASTER +/- n° = Easter + or specific number of days
- \$CHRISTMAS +/- n° = Christmas + or specific number of days
- dd/mm = specific date of the year

2.0 Application Layout

This chapter provides basic instructions to start the application and a description of the menus and main window commands.

2.1 Application Start

BCS can be started via the Microsoft Windows® Start menu by selecting the respective option, then clicking BCS on the submenus accessed in quick succession. The following SystemLogin window pops up:



Username, Password, Member Code and Environment must be entered in the fields.

Password is case-sensitive. Once done, the Login button or the Enter key gives access to the application.

- PDC: Production
- CDS: Test

2.2 Main Window

After the user has been authenticated, the BCS top-level tool bar on which username is shown appears on the screen. It is made up of three functional sections: Menu Bar, Tool Bar - through which it's possible to access directly the menu commands - and Active Windows Bar.



Menu Bar

The Menu Bar contains the following menus and commands:

File

Login Activates the systementry contro

Save Environment Saves the windows configuration

Change Password Change the current password

Exit Application exit

Archives

Markets List of the available markets

Classes List of the classes

Tradable Series List of the tradable series

Participants Clearing participants list

Non-Clearing members list of own non-clearing members

Sub Accounts list of secondary accounts for eve

Positions

Positions Increase or decrease the volume

> exercises execution; whole or par position into a different sub-acco

Trades

Trades International give up, contract tra

open/close change, client code m

7

Transferred trades to be confirmed

Received trades accepta

Received trades accepta

Transferred trades to be confirmed

2.3 Tool Bar

The main window tool bar is located under the menu bar. It gives quick access to the most frequently used commands, which are mapped to specific buttons. Each command can be activated by clicking on the corresponding button.

Tw o lights appear on the tool bar:

- 1. A first light stands for the centralized layer server/client connection status (green/red)
- 2. A second light indicates the operational status of the clearing system (green/red).

2.4 Command Selection

A command is an instruction through which BCS executes a specific operation. Commands can be selected from:

- Menu bar
- Tool bar
- Quick selection menu: after a BCS object has been selected, its specific commands quick selection
 menu can be shown by clicking on the mouse right button. The quick selection menu can be closed, if
 no command has been selected, just by clicking anywhere outside it.

2.5 Change Password

In the File menu click "Change Passw ord"; the following window will appear, showing the username and the member code and allowing the user to change the current password to a new value.



Click the "OK" button to send the new password to the system, or click "Reset" to cancel the values in the blanks.

3.0 Common Functions

The aim of this chapter is to describe some commonly used functions such as operations on displayed data, window features configuration, data sort criteria, data filters, data export functions.

3.1 Window Features Configuration

Every window is provided with a **Configuration** menu that allows the setup of some window features.

The **Setting** window appears by selecting the **Option** command in the **Configuration** menu of each window. This window allows to:

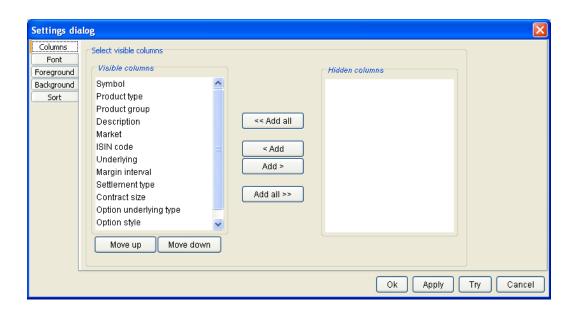
[Columns] Show/hide columns

[Font] Character type and dimension configuration

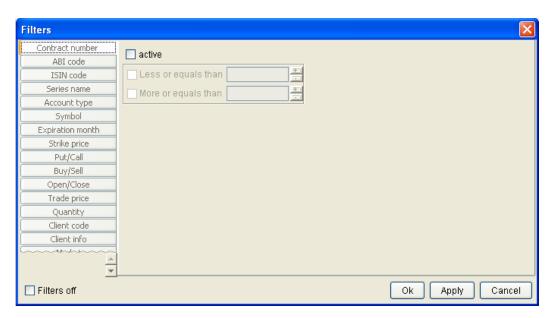
[Foreground] Text row s color configuration

[Background] Table row s background colors configuration

[Sort] Sort row s according to specific criteria.



The Filter command in the Configuration menu allows the activation of selection criteria for data display.

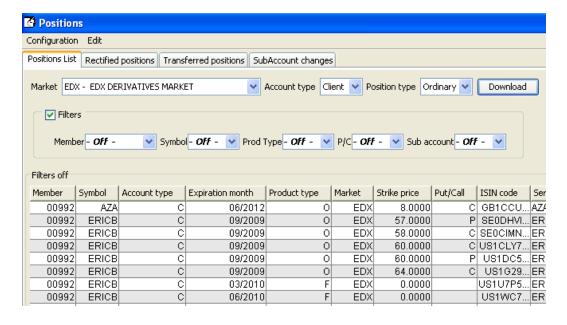


Filters where editing is allowed, regular expressions can be used to isolate the data set of interest (See Appendix A: Regular Expressions)

The **Toggle View** command in the **Configuration** menu allow s to show/hide the w indow tool bar. Alternatively, it is possible to use the function-key [Ctrl-W].

3.2 Quick Filters

Many windows allow the user to set quick filters.



The "Filters" flag allow s to enable/disable all the filters set.

A single filter can be disabled when the mouse focus is on the filter box by pressing ESC key.

In filters where editing is allowed, regular expressions can be used to filter data set of interest (See Appendix A: Regular Expressions)

Ctrl + W sequence key allows to show/hide the window tool bar as well as quick filters.

Quick filers are not saved during client logout procedure.

3.3 Saving and Closing Windows

Windows property set via Configuration menu commands (i.e. static filters, characters, colors, sort criteria, etc.) can be saved.

The Save Environment command, in the File menu of the main tool bar window, allows saving the current configuration of the windows.

Furthermore, the current configuration is saved before closing and exiting the BCS client.

3.4 Data Print

Many windows allow printing displayed data to a configured printer.

The **Print Preview** command allow s viewing data before printing.

The **Print command** allows sending data to a configured printer

Only data show non the screen are printed: hidden columns, if any, or filtered data will not be printed.

3.5 Data Export to Excel or ASCII

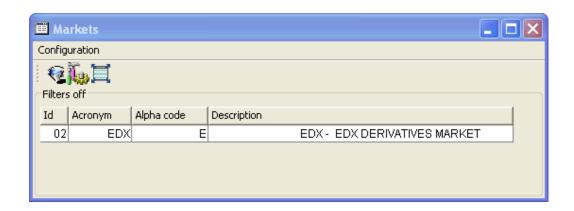
The Save command allows saving windows data to an Excel spreadsheet or ASCII/PDF file.

4.0 Archives

This menu displays clearing static data, like available markets, product classes, tradable series and clearing house members. It also allows every member to display sub accounts and client codes assigned to different sub accounts.

4.1 Markets

The Markets item shows the information concerning available markets.



Selecting the Filter command in the Configuration menu, it's possible to choose markets display criteria: **Id** and **Acronym**.

Table columns description:

ld	Market identification code
Acronym	Market identification name
Alpha code	Market alphanumeric code
Description	Market description

4.2 Classes

<u>Classes</u> item shows information concerning the list of product groups i.e. products with the same underlying. A class is a group of derivatives instruments, options or futures, with the same underlying.

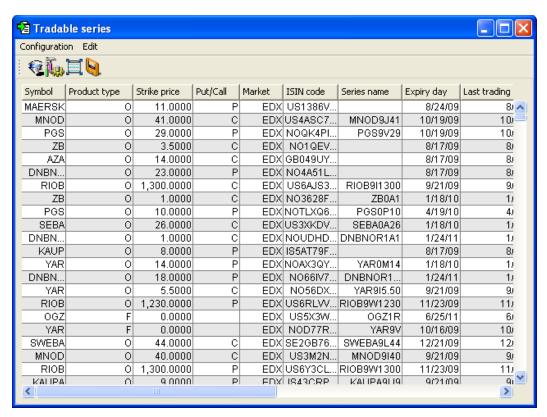
Selecting the **Filter** command in the **Configuration** menu it's possible to choose classes' display criteria: Symbol, ISIN, Underlying, Type, Market, Product Group, Settlement Type, Option Underlying Type, Option Style and Contract Size.

Symbol	Class alphanumeric code
Product Type	Product type (B = bond, C = equity and fund quotes, F=future, O= option, R = repo, V= convertible, W = w arrant)
Product Group	Financial product reference groups i.e. a set of derivatives instruments, belonging to different classes, whose underlyings show correlated prices.

Description	Financial instrument description
Market	Trading market
ISIN Code	ISIN code of underlying financial instrument
Underlying	Alphanumeric code of underlying financial instrument
Margin interval	Maximum upw ard/downward expected deviation of the underlying price
Settlement Type	Settlement type of a financial contract (ST = settled, CSH = cash settled, FUT = future style)
Contract size	Number of shares underlying a standard contract
Option Underlying type	Financial instrument type (Bond, Equity, Index)
Option Style	Option style (American, European)
Settlement days	Number of days betw een trade and settlement date

4.3 Tradable Series

 $\underline{\text{Tradable series}} \text{ item show s the list of the standard tradable series on current date}.$



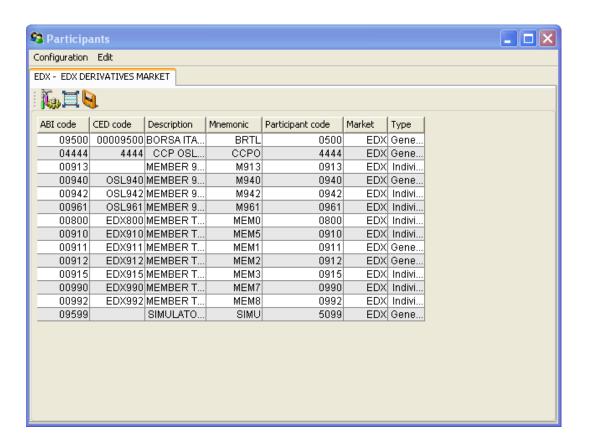
Selecting the **Filter** command in the **Configuration** menu it's possible to choose tradable Series display criteria: ISIN, Series name, Symbol, Type, Put/Call, Market Id, Strike Price, Expiry Date, Open Interest and DeliveryType.

Symbol	Product alphanumeric Symbol
Product type	Product type (B = bond, C = equity and fund quotes, F= future, O= option, R = repo, V = convertible, W = w arrant)
Strike price	Strike price
Put/Call	Option type (Put/Call)
Market	Trading market
ISIN Code	Instrument ISIN code
Series name	Name of the series
Expiry Day	Expiry date

Last Trading Day	Last Trading Date
Closing Price	Daily settlement price (closing price)
Last Day Price	Last day settlement price
Closing Price Date	Closing price reference date
Underlying Price	Underlying product reference price
Open interest	Open Long/short positions amount
Volatility	Volatility calculated by the clearing house
Intraday	Identify an intraday generated series
Delivery Type	C=Cash; P=Physical

4.4 Participants

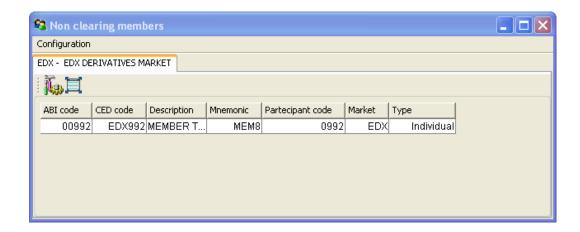
 $\underline{\textit{Participants}} \text{ item show s, for each available market, clearing and non-clearing members list.}$



ABI Code	Member ABI code
CED Code	Market assigned numeric code
Description	Member name
Mnemonic	Alphanumeric code
Participant Code	Member clearing code
Market	Trading Market
Туре	Member type (Individual Clearing member, Non-Clearing member, General Clearing member)

4.5 Non-clearing Members

Non-clearing members item shows, for each available market, the own company non-clearing members list.



ABI Code	Participant ABI code
CED Code	Market assigned numeric code
Description	Participant name
Mnemonic	Alphanumeric code
Participant Code	Participant clearing code
Market	Trading Market
Туре	Member type (Non-Clearing member, General Clearing member)

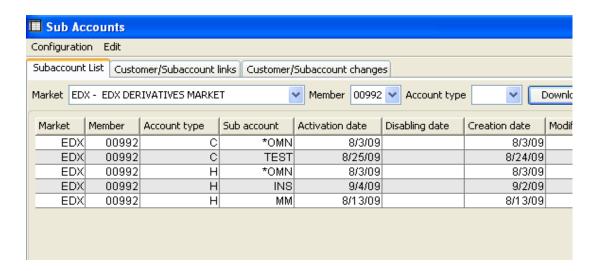
4.6 SubAccounts

 $\underline{\textbf{Subaccounts}}$ menu allow $\underline{\textbf{s}}$ to display the list of sub accounts for each market and w hich members' client codes are assigned to.

After $\underline{\textbf{Subaccounts}}$ menu has been opened, a w indow with three labels appears:

- 1. Subaccount list: displays for each market the list of sub accounts.
- 2. <u>Customer/Subaccount links</u>: displays "client code/sub account" associations for each existing sub account.
- 3. <u>Customer/Subaccounts changes</u>: displays the list of client codes assigned to a new sub account on current day; the new associations "client code/sub account" will be w orking from the following day.

SubAccount list



Market	Trading Market
Member	Member ABI Code
Account Type	Account type (House/Client)
SubAccount	SubAccount identifier
Activation date	Sub account activation date
Disabling date	Sub account deactivation date
Creation date	Sub account creation date
Modify date	Sub account modification date
Market maker flag	Flag Market maker
Liquidity provider flag	Flag Liquidity provider
Keep net position flag	Flag Keep net position
Net Margin Flag	Net Margin flag
Sub account status	Sub account state

Customer/SubAccount links

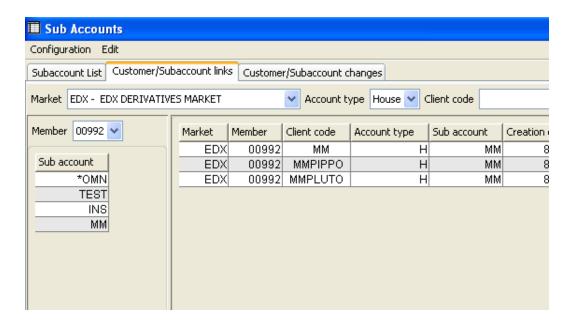
The window with "Customer/Sub account links" label allows to display "Sub Account-client code" associations;

The list of all existing sub accounts is automatically shown on the left side of the window displaying all Members referring to a specific Market.

Starting from sub accounts list, it is possible to display on the right side of the window all "Sub accounts-client codes" associations in two different ways:

- selecting w hatever Sub Account among those displayed in the Sub Account list; in this case the system will display only the associations corresponding to that specific Sub Account.
- pushing the <u>Download All button</u>; in this case the associations corresponding to all <u>Sub Accounts</u> in the list will be displayed

In both cases, it is possible to limit the search of "Sub Account-client code" specifying Account Type and/or the first letters of client code.

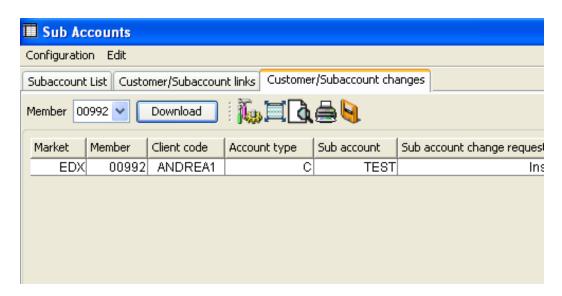


Market	Trading Market	
Member	Member ABI Code	
Client code	Client Code identifier	
Account type	Account type (House/Client)	

Sub account	Sub account identifier
Creation date	When the sub account was created
Modify date	When the sub account was modified
Sub account status	Sub account state

Customer/Sub Account changes

This function allows to display all modifications made during the current business day on "client codes – sub accounts" associations for a specific Member, included any new association. In particular, the selection of the Member field filters the list to its own modifications. All displayed modifications will be operative from next business day.



Market	Trading Market
Member	Member ABI Code
Client code	Client code identifier
Account type	Account type (House/Client)
Sub account	Sub Account identifier

Sub account change request	Description of requested operation type
Sub account change time	Time at w hich the request was made

5.0 Positions

This menu allows users to manage positions registered in the clearing house. It is possible to download the positions list and to access the functions of positions rectification, subaccount change and early exercise.

5.1 Positions

Positions menu displays open positions registered on Members' accounts in the clearing house and allows to execute rectifications, early exercises and sub account change operations.

Once selected Positions menu, a four tabs window pops up:

<u>Positions list</u>: it shows the list of executed operations and open positions held at the clearing house. For each open position it is possible to access the <u>Rectify, SubAccount Change and Exercise Request</u> commands via the quick selection menu.

Rectified positions: it shows the rectified positions list.

Transferred positions: it shows the transferred positions list.

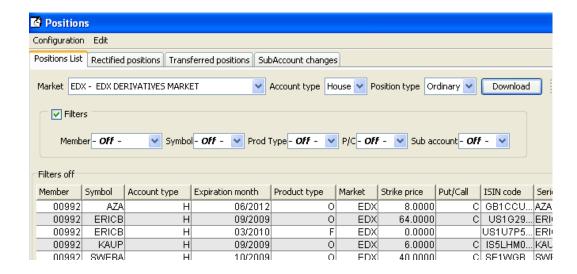
SubAccounts Changes: it shows the list of positions modified by a "SubAccount Change" operation.

5.2 Position Rectification Request

In order to access the position $\underline{\text{Rectify}}$ command, the user has to display the open positions list by selecting the Positions tab.

The user is required to select the *market*, from which to obtain the list of open positions, among markets available in the appropriate summary box, the *account type* (House/Client) and the *position type*.

The rectification is allow ed for both client and house account types.



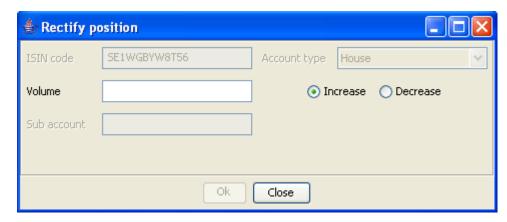
Selecting the **Filter** command in the **Configuration** menu it's possible to choose position display criteria: Member, Symbol, Account Type, Expiry Month, Product Type, market, Stike Price, Put/Call, Isin Code, Series name, Long, Short, Opening Date, Last Operation, Transfer Price.

Member	Member ABI Code
Symbol	Alphanumeric symbol of underlying instrument
Account Type	Account type (House/Client)
Expiration Month	Expiration Month
Product Type	Product type (B = bond, C = equity and fund quotes, F = future, O = option, R = repo, V = convertible, W = w arrant)
Market	Trading Market
Strike Price	Strike Price
Put/Call	Option type (Put/Call)
ISIN Code	ISIN Code
Series name	Name of the Series
Long	Long current positions

Short	Short current positions
Opening Date	Position opening date
Last Operation	Last operation date
Long at opening	Long positions at market opening
Short at opening	Short positions at market opening
Transfer Price	Transfer price
Intraday exercises	Early intraday exercises
Intraday as signments	Intraday assignments
Exercises	Early exercises
Assignments	Assignments
In the money amount	In the money amount
Sub Account	SubAccount

Once selected the row of the position to rectify, the user can access to the corresponding quick selection menu *Rectify....;*

 $\underline{\textit{Rectify Position}}\, \underline{\textit{dialog w indow allows to increase}} / \underline{\textit{decrease positions on house}} / \underline{\textit{client accounts}}.$



Operational steps description:

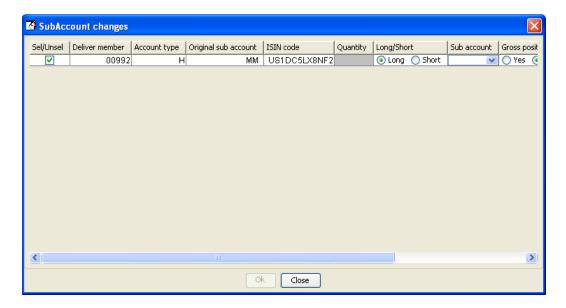
- 1. Insert the amount of positions to be adjusted into the Volume field
- 2. Select the Increase or Decrease option
- 3. Press **OK** button to confirm

A confirmation message informs the user that the transaction has been successfully committed.

5.3 SubAccount Changes

This function allows to change the sub account of a specific position.

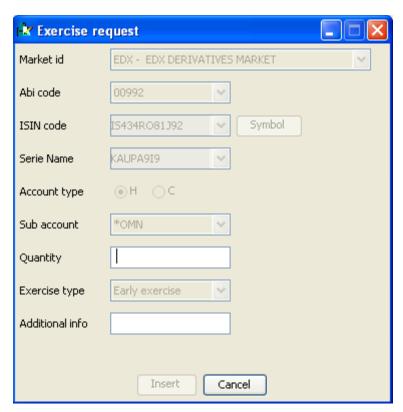
Once selected a *position*, it is possible to assign it to a different sub account; contextually it is possible to make a modification of gross position rectification and to assign a part of the original *position* to the new *sub account*. The operation is committed to the systemby clicking the *OK* button.



5.4 Exercise Request

This function allows to execute an early exercise request on the specified position.

Right click on a position in the positions list in order to access this function.



The user has to specify the amount to exercise; he can also specify additional information in the free text field before click Insert.

In case the user w ants to exercise an out of the money position, a pop-up message will appear, requiring the user confirmation before proceeding.

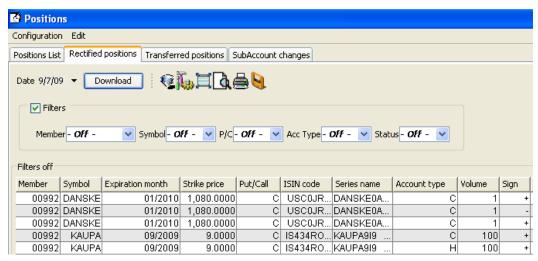
It's possible to dow nload the historical list of exercises through the client Exercise/Assignments main menu, in the Exercise Request History sub-menu.

Please notice

An early exercise can be executed also in the **Exercise Request** window, that can be reached through the **Exercise/Assignments** main menu.

5.5 Rectified Positions

Through this menu it is possible to view positions rectifications executed at current or at the specified date.



Selecting the **Filter** command in the **Configuration** menu it's possible to choose rectified position display criteria: Member, Symbol, Expiry Month, Stike Price, Put Call, Isin Code, Series name, Account Type, Volume, Sign, Status.

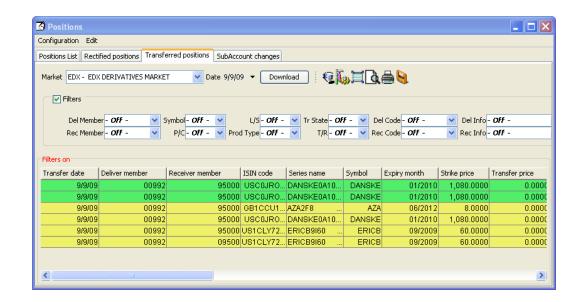
Table columns description:

Member	Member ABI Code
Symbol	Alphanumeric symbol of underlying instrument
Expiration Month	Expiration month
Strike Price	Strike Price
Put/Call	Option type (Put/Call)
ISIN Code	ISIN Code
Series name	Name of the series
Account Type	Account Type (House/Client)
Volume	Volume
Sign	Operation sign (+ = increase, - = decrease)
Execution Date	Position adjustment date
Execution Time	Position adjustment time
Status	Operation status (Y=executed, N=not executed)

Sub Account	Sub Account

5.6 Transferred Positions

Through this menu it is possible to view positions transfers executed at current or at the specified date. The user has to choose the reference market in the Market listbox, before click the Download button.



Selecting the **Filter** command in the **Configuration** menu it's possible to choose transferred position display criteria: Deliver Member, Receiver Member, Transfer Date, Isin Code, Series name, Symbol, Expiry month, Strike Price, Put Call, DeliverAccount, Receiver Account, Volume, Long/Short, Product Type, Market and Transfer Price.

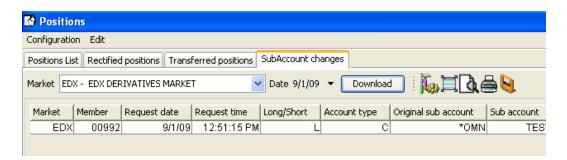
Deliver Member	Sender ABI Code
Receiver Member	Receiver ABI Code
Deliver Name	Sender name
Receiver name	Receiver name
Transfer Date	Transfer date
ISIN Code	ISIN Code

Series name	Name of the series
Symbol	Alphanumeric symbol of underlying instrument
Expiry Month	Expiry month
Strike Price	Strike Price
Put/Call	Option type (Put/Call)
Deliver Account	Deliver Account (House/Client)
Receiver Account	Receiver Account (House/Client)
Volume	Deal transferred volume
Long/Short	Position type (Long/Short)
Product Type	Product type (B = bond, C = equity and fund quotes, F = future, O = option, R = repo, V = convertible, W = w arrant)
Market	Trading market
Transfer price	Transfer price
Status	Status (H=Holding, P=Processed, R=Rejected, C=Cancelled)
RequestCode	Transfer request code assigned by the system
Transferred/Received	Transfer type (Transferred/Received)
Additional Info	Supplementary information
Deliver Info	Client information of deliver member
Deliver Code	Client Code of deliver member
Sub Account	Sub Account
Position Value	Counter value
Receiver Code	Client Code of receiver member
Receiver Info	Client info of receiver member

5.7 SubAccount Changes

This function allows to display all assignments of positions to different sub accounts made by clearing house members.

These assignments, and corresponding modifications, will be displayed after having selected the reference market and the transfer date, and clicked the *Download* button.



Market	Trading Market
Member	Member ABI Code
Request date	Date of the modification request
Requesttime	Time of the modification request
Long/short	Position type (Long/Short)
Account type	Account Type (House/Client)
Original sub account	Original sub account identifier
Sub account	sub account identifier
Gross position rectification	Gross position rectification flag
Symbol	Alphanumeric symbol of underlying financial instrument
Expiration date	Expiration Date
Strike price	Strike Price
Put/Call	Option type (Put/Call)

Product type	Product type (B = bond, C = equity and fund quotes, F = future, O = option, R = repo, V = convertible, W = w arrant)
ISIN Code	ISIN Code
Series name	Name of the series
Quantity	Quantity
Transfer price	Transfer price
Requeststate	Request state
Return Code	Operation result
Countervalue	Countervalue

6.0 Trades

This menu allows management of executed trades registered in the clearing house system. It is possible to dow nload the list of trades, the history of a single trade and to access the functions of trade transfer, split, open/close change and client code modification.

6.1 Trades

Using <u>Trades</u> menu, user can access the following functions:

- dow nload of company trades executed in the specified trading day;
- contracts transfer;
- international give-up;
- trades split;
- client code change (allow s Subaccount change);
- Trade history

For each trade, detailed information is show n.

At the window opening, a five tab dialog pops up:

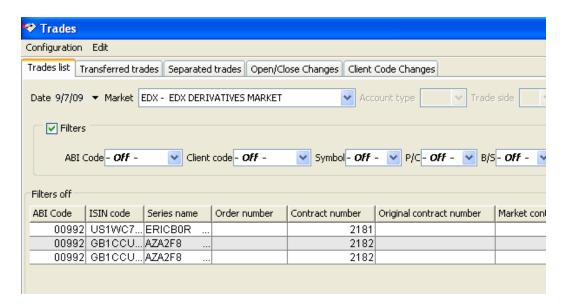
- <u>Trades list</u>: it shows the trade list and allows separation, transfer, International Give Up, open/close and client code change operations and the trade history functionality.
- Transferred Trades: it shows the transferred trades list
- Separated Trades: it shows the separated trades list
- Open/Close Changes: it shows the list of trades whose open/close flag has been changed
- <u>Client code Changes:</u> it shows the list of operations of client code change
- Trade History: it shows all the clearing operations on the selected trade in which the customer is involved

6.2 Trade Transfer

To execute a trade transfer, the customer has to dow nload the trade list.

The user has to select the *Market*, the *Date*, the *Account Type* (House/Client) and the *Trade Side* (Buy/Sell). General Clearing Members view ownstrades and those of their Non-Clearing Members.

It is possible to transfer trades on both house and client accounts but only to counterparts other than the member itself.



Selecting the Filter command in the Configuration menu, it's possible to choose trades display criteria: Contract Number, ABI Code, ISIN Code, Series name, Order number, Market Contract Number, Contract state, Account Type, Symbol, Expiration Month, Strike Price, Put/Call, Buy/Sell, Open/Close, Trade Price, Quantity, Trader Id, Client Code, Client Info, Market, BuyMakerTaker, SellMakerTaker.

Contract Number	Clearing house registered trade identification number
Original Contract Number	Clearing house trade identification number before separation
ABI Code	Member ABI code
ISIN Code	ISIN code
Series name	Name of the Series
Order number	Unique identifier of the order
Marketcontractnumber	Contract number assigned by the market
Contract state	The state of the contract (T = trade / C = trade cancel)
Trade Date	Trade Date
Account Type	Account Type (House/Client)
Symbol	Alphanumeric symbol of underlying financial instrument
Expiration Month	Expiration month
Strike Price	Strike Price
Put/Call	Option type (Put/Call)
Buy/sell	Trade side (Buy/Sell)
Contract Price	Trade Price
Quantity	Trade Quantity
TraderId	Trader identifier
Client Code	Client alphanumeric Code
Transferred Quantity	Transferred quantity
Client Info	Optional free text notes
Market	Trading Market
Trade Source	M = Market, G = International Give-Up, L = Local Give-Up, S = Split, D =

	Data Entry)
Sub Account	Sub account
MarketSource	Market Source of the trade (RegularTrade, AsOfTrade, Strategy, LateTrade, Implied, ExchangeGranted1, ExchangeGranted2, Cross, Cross Block, Committed, Committed Block)
BuyMakerTaker	Buy Side Maker/Taker (M=Maker; T=Taker; Blank in case of Cross, Cross Block, Committed Block, Committed trades)
SellMakerTaker	Sell Side Maker/Taker (M=Maker; T=Taker; Blank in case of Cross, Cross Block, Committed Block, Committed trades)

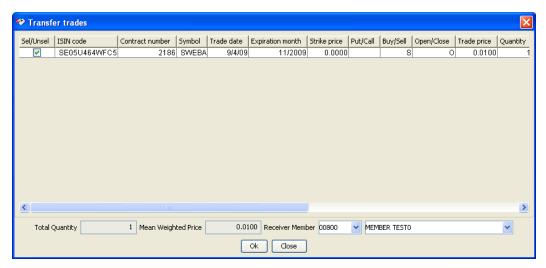
Select the single or multiple rows of the chosen trades and access the <u>Transfer</u> command through the quick selection menu by clicking on the right button

Trades Transfer dialog window allows to send a single or multiple transfer request for trades executed to a counterpart who is a clearing house member

This function is allow ed only on T+1 trades; besides performing the trade transfer, this function executes the settlement of the variation margins or the premium as well, according to the execution price of the trade. It is also possible to transfer a partial number of lots of the trade thus allow ing the lots to be assigned to several clearing brokers.

The clearing house systemprocesses the transfer only after the counterpart has accepted the received trade.

It is possible to transfer trades on both house and client accounts and only to counterparts other than the member or house itself.



Operational steps description:

1. Insert the quantity of the trade to be transferred into the Quantity field.

- Select Yes or Not option to access the gross position rectification function: this option allows to increase
 automatically positions in case a positions lack occurs in the time frame between the request sending and
 counterpart's acceptance, due to market executed trades on the transferred series.
- 3. Insert data into the Additional Info (optional)
- 4. Select the ABI code and description of Receiver Member
- 5. Press the **OK** button to confirm

A confirmation message informs the user the that the transaction has been successfully committed.

6.3 International Give up

To execute the <u>International Give up</u>, select the single or multiple trade rows in the <u>Trade Transfers</u> window and access the quick selection menu.

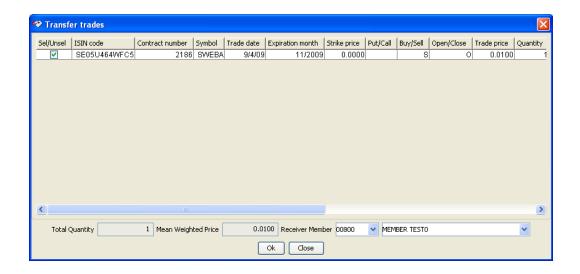
This function is available only on T trades.

The International Give up function allows the user to transfer trades at execution price on trade date to another member. This function is available only on T trades.

Besides performing the trade transfer, this function executes the settlement of the variation margins or the premium as well, according to the execution price of the trade. Only the clearer is due to deposit initial margins.

The clearing house system processes the transfer only after the counterpart has accepted the received trade.

It is possible to transfer trades on both house and client accounts and only to counterparts other than the member or house itself.



Operational steps description:

- 1. Only the overall amount of trade can be transferred. The Quantity field cannot be modified
- Select Yes or Not option to access the gross position rectification function: this option allows to increase
 automatically positions in case a positions lack occurs in the time frame between the request sending and
 counterpart's acceptance, due to market executed trades on the transferred series.
- 3. Insert data into the Additional Info field (optional)
- 4. Select the ABI code and description of Receiver Member.
- 5. Press **OK** button to confirm

A confirmation message informs the user that the transaction has been successfully committed.

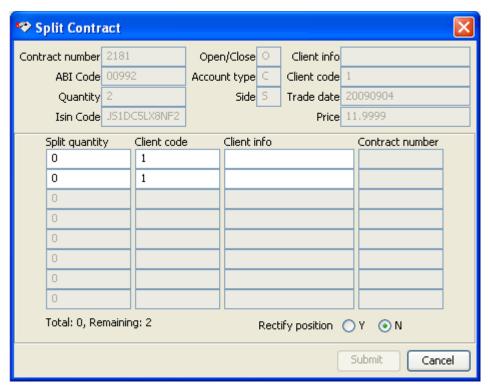
6.4 Trade Separation

To execute the <u>Separation</u> command, select the trade row in the <u>Trades</u> List window and access the quick selection menu.

The Separation function allows the user to split any trade into 8 trades at maximum, each one of different volume amount. The total amount of the separated trades must be equal to the volume of the original trade

This function is allow ed on T and T+1.

The client do not prevent the separation of trades either on client or house account. It should be noticed that separation of trades on client account or/and house account it's a Clearing House specific rule.



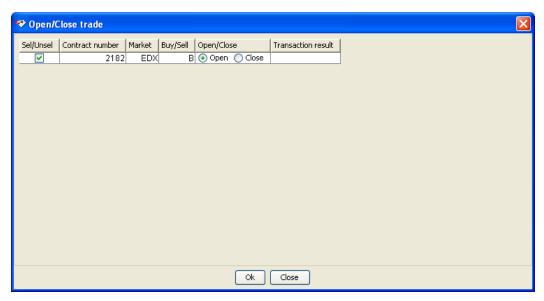
Operational steps description:

- 1. Insert the amount of trade to be split into the **Split quantity** field.
- 2. Insert data into the Client Code field (optional).
- 3. Insert data into the Client Info field (optional).
- 4. Repeat these operational steps until the remaining quantity will be equal to 0.
- 5. Select Yes or Not option to access the gross position rectification function
- 6. Press the Submit button to confirm

A confirmation message informs the user that the transaction has been successfully committed; the new trade numbers originated by the separation will be shown in the **Contract Num ber** column of the window dialog.

6.5 Open Close Change

To execute the $\underline{\text{Open Close Change command}}$, select the single or multiple trade rows in the $\underline{\text{Trades List}}$ w indow and access the quick selection menu.



Operational steps description:

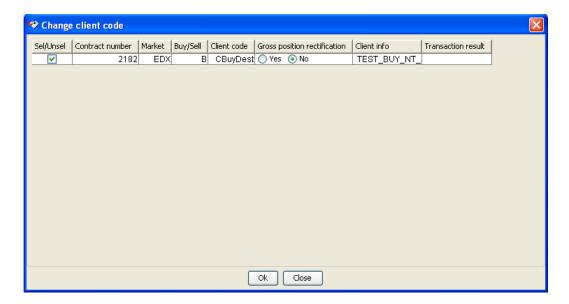
- 1. Select the **Open** or **Close** flag option
- 2. Press **OK** button to confirm

A confirmation message informs the user that the transaction has been successfully committed.

6.6 Client Code Change

To execute the $\underline{Client\ Code\ Change}$ command the customer has to select a trade in the $\underline{Trades\ List}$ w indow and to access the corresponding menu.

A dialog window appears, in which the user has to specify the new client code and, optionally, the ClientInfo.



Pushing the OK button, the market receives the operation; a confirmation message will be received by the user.

The client code change allows to performalso subaccount changes; these actions are executed by the system when a client code associated to the specific functionality is inserted.

6.7 Trade History

This functionality allows to view all the clearing operations done on a selected trade in which the customer is involved.

To access this functionality the customer has to select a trade in the <u>Trade List</u> w indow and right click to select the <u>Trade History</u> option.

A window will appear, showing a line for each clearing operation done on the trade that involve the customer.

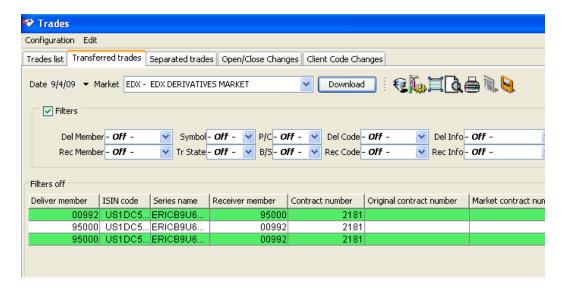
Table columns description:

Market	Trading Market
ABI Code	Member ABI code
Account Type	Account Type (House/Client)
Symbol	Alphanumeric symbol of underlying financial instrument
Expiration Date	Expiration Date
Strike Price	Strike Price
Put/Call	Option type (Put/Call)
Series name	Name of the Series
Trade Date	Trade Date
Trade Time	Trade Time
ISIN Code	ISIN code
Quantity	Trade Quantity
Trade Price	Trade Price
Open Close	Open close flag (O = open, C = close)

Contract Number	Clearing house registered trade identification number
Original Contract Number	Clearing house trade identification number before separation
Buy/sell	Trade side (Buy/Sell)
Client Info	Optional free text notes
Client Code	Client alphanumeric Code
Sub Account	Sub account
Deliver ABI code	Sender ABI Code
Receiver ABI code	Receiver ABI Code
Deliver Info	Client information of deliver member
Receiver Info	Client information of receiver member
Operation	Clearing operation

6.8 Transferred Trades

Trade transfers executed on current or previous dates can be view ed through this menu, after having selected the reference market and clicked the Dow nload button.



Selecting the **Filter** command in the **Configuration** menu, it's possible to choose transferred trades display criteria: Deliver Member, Receiver Member, Contract Number, Market contract number, Contract Date, Trade Price, Symbol, ISIN Code, Series name Expiration Month, Strike Price, Put/Call, Buy/Sell, Deliver Account, Receiver Account, Quantity, Transfer State, Transferred/Received, Deliver Info, Receiver Info, Additional Info, Deliver Code, Receiver Code, Market and Transfer Mode.

Table columns description:

Deliver Member	Sender ABI Code
Receiver Member	Receiver ABI Code
Deliver Name	Sender Name
Receiver Name	Receiver Name
Contract Number	Contract Number assigned by the clearing house
Original Contract Number	Contract Number assigned by the clearing house before separation
Marketcontractnumber	Contract number assigned by the market
Trade Date	Contact Date
Transfer Date	Transfer Date
Price	Transfer Price
Symbol	Alphanumeric symbol of underlying product
ISIN Code	ISIN Code
Series name	Name of the series
Expiration Month	Expiration month
Strike Price	Strike Price
Put/Call	Put/Call
Buy/Sell	Contract side
Deliver Account	Deliver Account Type (House/Client)
Receiver Account	Receiver Account Type (House/Client)

Quantity	Transferred quantity
Status	Status (H=Holding, P=Processed, R=Rejected, C=Cancelled)
RequestCode	Request Code assigned by the System
Transferred/Received	Transferred/Received trade transfer type
Deliver Info	Client information of deliver member
Additional Info	Free text additional information
Deliver Code	Client Code of deliver member
Market	Trading market
Receiver Info	Client information of receiver member
Receiver Code	Client Code of receiver member
Sub Account	Sub Account
Transfer mode	Transfer mode (Automatic/Manual)

6.9 Separated Trades

Separated trades can be viewed through this menu on current or previous dates.

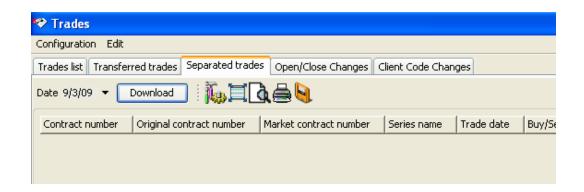
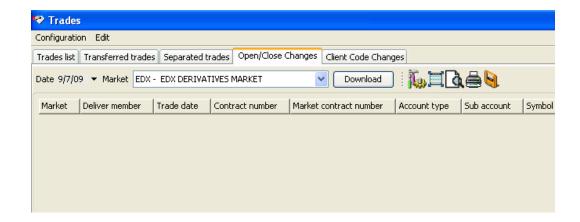


Table columns description:

Contract number	Contract Number assigned by the clearing house
Original Contract number	Contract Number assigned by the clearing house before separation
Marketcontractnumber	Contract number assigned by the market
Series name	Name of the series
Trade date	Trade date
Buy/Sell	Contract side
Account type	Account Type (House/Client)
Quantity	Contract quantity
Client info	Client information
Client code	Client code

6.10 Open Close Changes

Trade list whose open/close flag has been changed can be viewed through this menu on current or previous dates, after having selected the reference market and clicked the Download button.



Market	Trading market

Deliver member	Deliver member ABI Code
Trade date	Trade date
Contract number	Contract Number assigned by the clearing house
Marketcontract number	Contract number assigned by the market
Buy/SeII	Contract side
Account type	Account Type (House/Client)
Sub account	Sub account
Symbol	Alphanumeric symbol of underlying instrument
Expiration date	Expiration date
Stike Price	Stike price
Put Call	Option type (P = Put, C = Call)
ISIN code	Security ISIN Code
Series Name	Name of the series
Quantity	Contract quantity
Open Close	Open close flag (O = open, C = close)
Requesttime	O/C flag change request time
Requeststate	O/C flag change request state
Return code	Return code
Client info	Client information
Client code	Client code

6.11 Client Code Changes

The trades list for which a client code change has been made, can be displayed using this menu on current or previous days, after having selected the reference market and clicked the Download button.



Market	Trading market
Deliver Member	Deliver member ABI Codice
Trade Date	Trade date
Contract Number	Contract number
Marketcontractnumber	Contract number assigned by the market
Buy/Sell	Operation side (B = buy, S = sell)
Account Type	Account Type: House/Client
Open/Close	Open/Close
Original Client Code	Original Client Code identifier
Original sub account	Original sub account identifier
Client code	Client code identifier
Gross position rectification	Gross position rectification flag
Symbol	Alphanumeric symbol of underlying instrument
Expiration date	Expiration date

Strike price	Strike price
Put/Call	Put/Call
ISIN code	ISIN code
Series name	Name of the series
Quantity	Quantity
Transactiontime	Transaction time
Туре	Туре
Return Code	Return Code
Contract value	Contract value
Client info	Client Info

7.0 Operations To Be Confirmed

 $This \ menu \ allows to accept or reject trade transfers received from another clearing \ member.$

7.1 Confirming Received Trades

This function allows to accept/reject (letting the request expire at the end of trading day) a trade transfer/international give-up received by a clearing house counterpart. Only after the user has accepted the received trade, the clearing house system will perform the transfer.

Received trades can be allocated on house or client account. Transferredtrades received by the clearing house members are show n, if available, on command selection after having selected the reference market and clicked the Dow nload button.

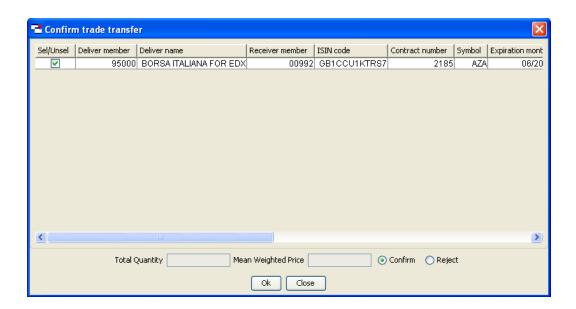


Selecting the **Filter** command in the **Configuration** menu, it's possible to choose transferred trades display criteria: Deliver Member, Receiver Member, Contract Number, Market contract number, Contract Date, Trade Price, Symbol, ISIN Code, Series name, Expiration Month, Strike Price, Put/Call, Buy/Sell, Deliver Account, Receiver Account, Quantity, Transfer State, Transferred/Received, Deliver Info, Receiver Info, Additional Info, Deliver Code, Receiver Code, Market and Product Type

Deliver Member	Deliver member ABI Code
Receiver Member	Receiver member ABI Code
ISIN Code	ISIN CODE
Series name	Name of the series
Deliver Name	Deliver Name
Receiver Name	Receiver Name
Contract Number	Contract Number assigned by the clearing house
Market contract number	Contract number assigned by the market
Trade Date	Trade Date
Transfer Date	Transfer Date
Price	Price of transferred trade
Symbol	Alphanumeric symbol of underlying instrument

Expiration Month	Expiration month
Strike Price	Strike Price
Put/Call	Put/Call
Buy/Sell	Contract side
Deliver Account	Deliver Account (House/Client)
Receiver Account	Receiver Account (House/Client)
Quantity	Transferred quantity
Status	(H=Holding, P=Processed, R=Rejected, C=Cancelled) Status
RequestCode	Transfer request provided by the Clearing system
Deliver Info	Client information of deliver member
Additional info	Free text additional information
Deliver Code	Client Code of deliver member
Market	Trading market
Product Type	Product type (B = bond, C = equity and fund quotes, F = future, O = option, R = repo, V = convertible, W = w arrant)
Receiver Info	Client information of receiver member
Receiver Code	Client Code of receiver member
Sub Account	Sub Account

In order to confirm received trades, select the single or multiple rows and via quick selection menu (right button on mouse) access to the following dialog:



- 1. Select Open/Close option
- 2. Select the Account Type (House/Client)
- 3. Insert data into the Client code field (optional)
- 4. Insert data into the Client info field (optional)
- Select Confirm or Reject. The clearing system lets transfer requests expire at the end of trading day if no action is executed.
- 6. Press **OK** to confirm

A confirmation message informs the user that the transaction has been successfully committed.

8.0 Exercise and Assignments

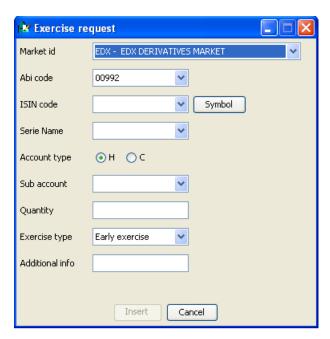
Exercise menu allows the user to send early exercise or ex by ex requests. Furthermore, it is possible to display all the exercise requests executed on a specific date on house/client account, all the ex by ex requests, the exercise proposals on expiry and the assignment messages received by the clearing house.

8.1 Exercise Requests

The Exercise Request command allows the user to send:

- 1. Early exercise requests on an American type option.
- 2. Ex by ex exercise requests to partially or entirely exercise an "out-of-the-money" option, which would be otherwise, abandoned by the clearing house.
- 3. Ex by ex exercise requests to entirely abandon an "in-the-money" option, w hich would be otherwise exercised by the clearing house.

Each of these actions can be performed via the Exercise Request dialog:



Operational steps description:

- Select a market into the Market Id field and insert the ISIN code of the option to exercise into the ISIN Code
 field; also select the option to exercise in the Series name field that will automatically set the ISIN into the
 ISIN code field..
- 2. Select the clearing member into the Abi Code field
- 3. Select 'H' option in the Account type field to exercise the option on house account, or select 'C' for Client
- 4. Select the subaccount associated to the position to execise in the SubAccount field.
- 5. Insert the volume to exercise in the Quantity field.
- 6. Select the **Exercise Type** (Early exercise/Exception) in the combo box.
- 7. Insert any additional information into the Client Info field
- 8. Press Insert to confirm

In case the user w ants to exercise (early/ex by ex) an out of the money position, a pop-up message w ill appear, requiring the user confirmation before proceeding.

Please notice

An early exercise can be executed also in the $\bf Position \ List \ window$, reachable from the $\bf Positions \ item \ of \ the \ main menu.$

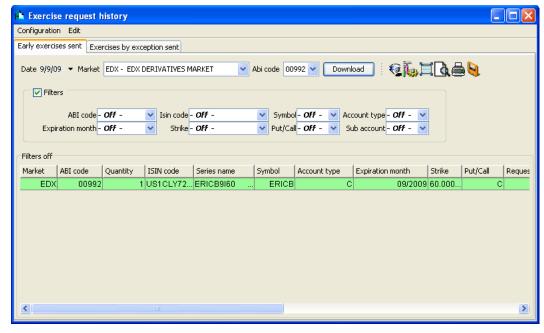
An ex by ex exercise can be executed also in **the Expiry Exercises Request** window which can be accessed from the **Exercise/Assignments** item in the main menu.

8.2 Exercise Request History

The Exercise Request History item shows the list of executed ex by ex and early exercise requests.

Early exercises sent

After having selected date, market and participant (empty for General Clearing Member) is possible to dow nload the list of early exercise requests sent to the system.

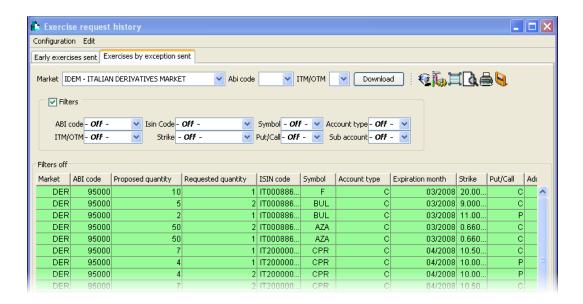


Market	Trading Market
Abi code	Abi code of the company w hich has executed the exercise request
Symbol	Series identification code

ISIN Code	Option ISIN Code				
Series name	Name of the series				
Strike	Strike Price				
Put/Call	Put/Call				
ITM/OTM	In the money/Out of the money				
Expiration month	Expiration Month				
Account Type	Account Type (House/Client)				
Sub account	Sub account of the position associated with the operation				
Exercise time	e Time exercise request has been forwarded				
Exercise date	Date exercise request has been forwarded				
Requestkey	System assigned exercise request key				
Quantity	Executed option quantity				
Total exercise quantity	Total exercise quantity				
Status	Request current validity status (P=Processed,C=Cleared)				
ITM/OTM amount	'in the money'/'out of the money' amount				

Exercises by exception sent

After the market and the clearing member (empty for the General Clearing Member) have been selected, push the Dow nload button to receive the list of sent ex by ex exercise requests. Select ITM/OTM flags in order to receive exclusively 'in the money' or 'out of the money' positions requests; if the flag is not specified all the requests will be displayed.



Market	Trading market			
Abi code	Abi code of the company which has executed the exercise request			
Symbol	Series identification code			
ISIN Code	Option ISIN code			
Series name	Name of the series			
Strike	Strike price			
Put/Call	Put/Call			
ITM/OTM	In the money/Out of the money			
Expiration month	Expiration month			
Account Type	Account type: (House/Client)			
Sub account	Sub account of the position associated to the operation			
Exercise time	Time exercise request has been forwarded			
Exercise date	Date exercise request has been forwarded			

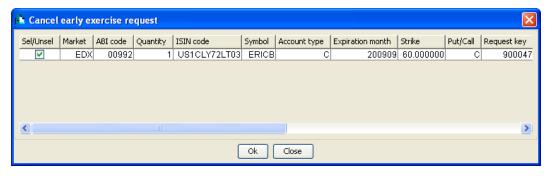
Additional info	Free text additional info
Quantity	Executed option quantity
Product type	Series typology
Requested quantity	Requested quantity
Proposed quantity	Proposed quantity
Underlying price	Underlying price
Status	Request current validity status (P=Processed ,C=Cleared)
ITM/OTM amount	'in the money'/'out of the money' amount

Please notice

In this case, a functionality to cancel ex by ex requests is not available because the last exercise request always overwrite the former for each series. To cancel an ex by ex request, send another request with quantity 0.

8.3 Cancel Sent Early Exercise Requests

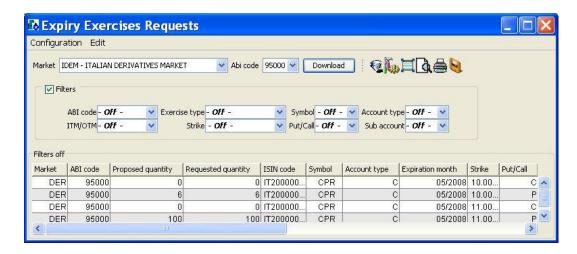
In order to activate the function select one or more early exercise requests in the early exercises list.



Push the OK button to confirm the operation.

8.4 Expiry Exercises Requests

The 'Expiry exercises requests' allow s to dow nload expiry exercises proposed by the clearing house. Select market and clearing member then push the Dow nload button.

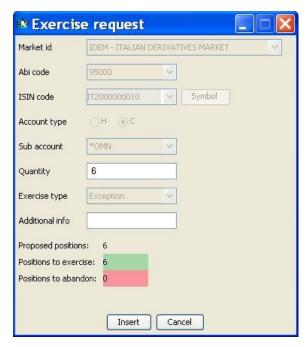


Market	Trading market			
Abi code	Abi code of the company w hich has executed the exercise request			
Symbol	Series identification code			
ISIN Code	Option ISIN code			
Series name	Name of the series			
Strike	Strike Price			
Put/Call	Put/Call			
ITM/OTM	In the money/Out of the money			
Expiration month	Expiration month			
Account Type	Account Type:(House/Client)			
Sub account	Sub account of the position associated to the operation			
Exercise time	Time exercise request has been forwarded			
Exercise date	Date exercise request has been forwarded			

Exercise type	Exercise type:P=Proposed, E=Exception			
Available quantity	Available option quantity			
Rejected quantity	Rejected option quantity			
Product type	Series type			
Requested quantity	Requested quantity			
Proposed quantity	Proposed quantity			
Proposed price	Underlying price			
ITM/OTM amount	'in the money'/'out of the money'amount			

8.5 Ex by Ex Exercise Request

This function allows to exercise 'out of the money' options proposed by the clearing house on expiry or to abandon 'in the money' ones. In order to access the function just right click on a row in the list of the expiry requests.



Just insert the quantity and additional information in the optional free text field. Then click OK.

In case the user w ants to exercise an out of the money position, a pop-up message will appear, requiring the user confirmation before proceeding.

The list of exercise requests can be seen through the Exercise/Assignments main menu into the Exercise Request History submenu

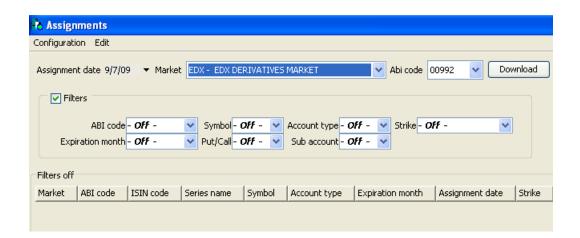
Please notice

Is possible to performan ex by ex also in the **Exercise Request** window, that can be reached from the **Exercise/Assignment** main menu.

8.6 Assignments

Push the Assignments button to get the list of assignments received by the clearing house.

The calendar date has to be selected along with market and clearing member (empty for General Clearing Member) to push the Download button.



Market	Trading market				
Abicode	Clearing member Abi code				
ISIN Code	ISIN Code				
Series name	Name of the series				
Symbol	Underlying alphanumeric code				
Sub account	Sub account				

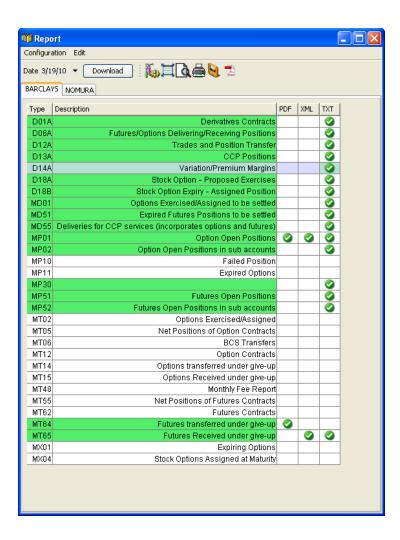
Expiration month	Option expiration date	
Strike	Strike price	
Account Type	Account type (House/Client)	
Put/Call	Put/Call	
Assignment date	Assignment date	

9.0 Report

This menu displays the list of clearing reports provided by the clearing house w hich the client may view or save to the local computer.

9.1 Report

This command shows the list of the clearing reports available on a specified date. Some reports are available in a multiple format, so the user can select to download them in TXT, PDF or XML. A GCM (General Clearing Member) can manage and download also its NCM reports.



Туре	Report type identification code
Description	Report description
PDF	PDF Report availability status
XML	XML Report availability status
тхт	TXT Report availability status

Operational steps description:

1. Select the **Date** and press **Download** button to view available reports for that date.

- 2. If a GCM (General Clearing Member), more than one tab will appear, allowing to select the participant for which to download the report.
- Select the row of the desired report and right click on the row. Depending on the availability of the formats, the
 option is to open them ("Show Report as") or save them in the local PC ("Save Report as").



The report window always shows the most recent version of a report, in case more than one update is sent during the same day.

Appendix A - Regular Expressions

A regular expression is a string (sequence of characters) built with a proper syntax which express characteristics shared by a set of strings.

Assume the intention is to use a notation to indicate all the strings which begin by 'a' and end by 'o': we will write 'a*o' to indicate all these strings which share the characteristic to start by 'a' and end by 'o' The following strings belong to the set mentioned above 'ao', 'ago', 'also' but not 'aristotelis' or 'psycho'. The character '*' used into the regular expression indicate whatever sequence of characters.

х	"x" character
0	Finds a single character into the brackets. For instance, [abc] looks for an 'a', a 'b' or a 'c'.[a-z] is an interval and finds every small character of the alphabet. Mixed cases can occur: [abcq-z] looks for b, c, q, r, s, t, u, v, w, x, y, z, just as [a-cq-z].
[^]	Finds every small character not included into the brackets. For instance, [^abc] finds all the characters different than "a", "b", o "c". [^az] looks for every character different than small letter
^	Indicates the beginning of the string
\$	Indicates the end of the string
()	Define a sub expression

X?	X w hich recurs 0 or one time
X*	X w hich recurs 0 or several times
X+	X Which recurs at least once
X{n}	X w hich recurs twice exactly
X{n,}	X w hich recurs at least n times
X{n,m}	X w hich recurs at least n times and no more than m times
XY	X follow ed by Y
X Y	X or Y
X Y	X or Y

 \boldsymbol{X} and \boldsymbol{Y} are regular expressions; examples:

- [ab]* = all the strings w hich start by a or b
- [^a-c]*a\$ = all the strings w hich start by "a", "b" e "c" but w hich end by "a"
- *s{2}* = all the strings w hich have two "s" at any point of the sequence
- *cu(t|p) =strings w hich end by "cut" and "cup"

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